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Sheet 1 of 1 F m PTO-1449 TADEN U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE ATTY, DOCKET NO. SERIAL NO. 10/077,633 920976.90172 (Rev. 2-88) APPLICANT INFORMATION DISCLOSURE STATEMENT Thomas G. Thundat **BY APPLICANT** FILING DATE Feb 15, 2002 1645 753 (Use several sheets if necessary) U.S. PATENT DOCUMENTS DOCUMENT NUMBER CATE CLASS SUBCLASS FILING DATE F APPROPRIATE EXAMPLER'S INITIAL RECEIVED JUN 0 6 2002 **FOREIGN PATENT DOCUMENTS** DOCUMENT NUMBER DATE OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) C. Gurtner et al., "Photoelectropheretic Transport and Hybridization of DNA Oligonucleotides on Unpatterned Sillcon Substrates", Journal of the American Chemical Society, vol. 122, no. 36 (2000), pp. 8589-8594 EXAMINER Briant Motse DATE CONSIDERED EXAMINER: Initial if a citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in

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		Application Number	10/077,633		
INFORM	ATION DISCLOSURE	Filing Date	February 15, 2002		
		First Named Inventor	Thundat et al.		
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(Use as many sheets as necessary)		Examiner Name	- Mutschler		
et 1	of2	Attorney Docket Number	920976.90172		

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (F Intown)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevan Figures Appear
311		^{US-} 5,500,188	03-19-1996	Hafeman et al.	
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Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines,	1
		Country Code ³ Number ⁴ Kind Code ⁵ (# known)	MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages Or Relevant Figures Appear	1
SUL		WO 00/13784	03-16-2000	Motorola, Inc.		1
BILL		WO 98/57157	12-17-1998	Ecole Centrale De Lyon		t
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Complete if Known Substitute for form 1449/PTO **Application Number**

10/077,633 **INFORMATION DISCLOSURE** Filing Date February 15, 2002 STATEMENT BY APPLICANT First Named Inventor Thundat et al. Art Unit 753 1045 (Use as many sheets as necessary) **Examiner Name** Mutschler

Sheet 12 Attorney Docket Number 2 920976.90172

Examiner	O14-	OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Τ²
BUM		INOUE S Et Al, "Chemical-Imaging Sensor Using Enzyme", Sensors and Actuators B, Elsevier Sequoia S.A., Vol. B32, no. 1, 04-01-1996, pgs. 23-26, XP000636382.	
BUT	-	BROWN G N Et Al, "Development and Characterization of a Titanium Dioxide-Based Semiconductor Photoelectrochemical Detector" Analytical Chemistry, American Chemical Society, Columbus, vol. 64 no. 4, 02-15-1992, pgs. 427-434, XP000261109	
BUM		OWICKI J C Et Al, "The Light-Addressable Potentiometric Sensor: Principles and Biological Applications", Annual review of Biophysics and Biomolecular Structure, Palo Alto. CA. Vol 23, 1994 pgs. 87-113, XP002073025.	_
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